

Appln. No. 10/707,390
Docket No. PES-D-02-038 / PES-0183

REMARKS / ARGUMENTS

Status of Claims

Claims 1-30 are pending. Claims 28-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected invention. Claims 1-7 and 9-26 stand rejected. Claims 8 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim. Applicant appreciates the Examiner's comments regarding the allowability of the noted claims.

Applicant has provided herein clarifying remarks regarding Claims 1-27, has canceled Claims 28-30, and has added Claims 31-32, leaving Claims 1-27 and 31-32 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Rejections Under 35 U.S.C. §102(b)

Claims 1, 10-11, 13-16, 18, and 25 stand rejected under 35 U.S.C. §102(b) as being anticipated by Fujita (U.S. Publication 2002/0148502 hereinafter Fujita).

Applicant traverses this rejection for the following reasons.

Applicant respectfully submits that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, *in a single prior art reference.*" *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the *** claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the single source must disclose all of the claimed elements "arranged as in the claim." *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984) (emphasis added). Missing elements

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may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

Regarding Independent Claim 1

To allege anticipation by Fujita of the claimed "...a power source... wherein the power source is adapted to prevent more than one of the actuatable valves from simultaneously having an actuated state", the Examiner remarks "The term "adapted to" is being given patentable weight in such that the system is capable of only actuating one valve at a time (see MPEP 2111.04)" (emphasis added) (Paper No. 20060215, page 2)

Applicant respectfully submits that the claimed invention is limited by the "adapted to" clause to "prevent more than one of the actuatable valves from simultaneously having an actuated state." Applicant respectfully submits that the Examiner's remark that "the system [of the reference] is capable of only actuating one valve at a time" (emphasis added) (Paper No. 20060215, page 2) does not suffice to support the allegation of disclosure by Fujita of the claimed limitation to "prevent more than one of the actuatable valves ...", and therefore, Fujita does not disclose each and every element of the claimed invention as set forth in the claim.

Furthermore, Applicant finds Fujita to disclose a "... trouble detecting means which judge a trouble of the gas pressure detecting means on the basis of the *opening and closing actions of at least two stop valves* among the respective stop valves..." (Fujita, paragraph [0006], lines 8-10). Additionally, Applicant finds Fujita to disclose "the device may be configured to simultaneously open two or more stop valves". (Fujita, Paragraph [0022], lines 4-5.

In comparing Fujita with the instant invention, Applicant finds Fujita to be contrary to, as well as absent of, disclosure of the claimed "... the power source is adapted to prevent more than one of the actuatable valves from simultaneously having an actuated state."

A system such as Fujita that operates on the basis of the opening and closing actions of *at least two stop valves* is *capable of actuating more than one valve at a time*,

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and therefore does not *prevent more than one of the actuatable valves from simultaneously having an actuated state*, which is specifically claimed for in the instant invention.

Furthermore, if, and only for purposes of example, Applicant were to accept the Examiner's interpretation of the claimed invention being "capable of *only actuating one valve at a time*", then Fujita absolutely does not anticipate the claimed invention because Fujita "may be configured to simultaneously open two or more stop valves".

Accordingly, Applicant submits that Fujita does not disclose each and every element of the claimed invention arranged as in the claim, and absent anticipatory disclosure in Fujita of each and every element of the claimed invention arranged as in the claim, Fujita cannot be anticipatory.

Regarding Claim 16

To allege anticipation by Fujita of the claimed "...wherein the power is insufficient to actuate the actuatable valve if more than one switch is closed", the Examiner remarks "The term "wherein" is being given patentable weight in such that the system [of the reference] only need to be capable of only opening one valve." (emphasis added) (Paper No. 20060215, page 3).

Applicant respectfully submits that the claimed invention is limited by the "wherein" clause to provide a process comprising "...energizing the circuit defined by the closed switch to open the actuatable valve...wherein the power is insufficient to actuate the actuatable valve if more than one switch is closed."

Applicant finds Fujita to disclose "... although the gas feed device 20 of the illustrative embodiment judges trouble of the pressure sensors 52 to 58 by fully opening all of the fully closed stop valves 42 to 48, the device may be configured to simultaneously open two or more stop valves..." (Fujita, paragraph [0022], lines 1-5). Applicant submits that Fujita is absent disclosure of the claimed "...energizing the circuit defined by the closed switch to open the actuatable valve...wherein the power is insufficient to actuate the actuatable valve if more than one switch is closed."

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Furthermore, if, and only for purposes of example, Applicant were to accept the Examiner's interpretation of the claimed invention "such that the system only need to be capable of only opening one valve", then Fujita absolutely does not anticipate the claimed invention because Fujita may be configured for "*fully opening all of the fully closed stop valves*" or "the device may be configured to *simultaneously open two or more stop valves*".

As such, Fujita necessarily cannot be read to disclose the claimed limitation of "*...energizing the circuit defined by the closed switch to open the actuatable valve ...wherein the power is insufficient to actuate the actuatable valve if more than one switch is closed.*"

Accordingly, Applicant submits that Fujita does not disclose each and every claim element arranged as in the claim, and absent anticipatory disclosure in Fujita of each and every element of the claimed invention arranged as in the claim, Fujita cannot be anticipatory.

Regarding Claim 25

To allege anticipation by Fujita of the claimed "*...wherein the actuatable valve opens ... in response to a signal from the processing unit and in the absence of a second actuatable valve of a second control module of the gas regulation system being open*", the Examiner remarks "The term 'wherein' is being given patentable weight in such that the system [of the reference] only need to be capable of only opening one valve at a time." (Paper No. 20060215, page 4)

Applicant respectfully submits that the claimed invention is limited by the "wherein" clause to provide a control module "*...wherein the actuatable valve opens ... in response to a signal from the processing unit and in the absence of a second actuatable valve of a second control module of the gas regulation system being open.*"

Applicant finds Fujita to disclose "... although the gas feed device 20 of the illustrative embodiment judges trouble of the pressure sensors 52 to 58 by fully opening all of the fully closed stop valves 42 to 48, the device may be configured to simultaneously open two or more stop valves..." (Fujita, paragraph [0022], lines 1-5).

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Applicant therefore submits that Fujita is absent disclosure of the claimed "...wherein the actuatable valve opens ... in the absence of a second actuatable valve ... being open"

Furthermore, if, and only for purposes of example, Applicant were to accept the Examiner's interpretation of the claimed invention "such that the system only need to be capable of only opening one valve", then Fujita absolutely does not anticipate the claimed invention because Fujita may be configured for "*fully opening all of the fully closed stop valves*" or "the device may be configured to *simultaneously open two or more stop valves*".

As such, Fujita necessarily cannot be read to disclose the claimed limitation of "...wherein the actuatable valve opens ... in response to a signal from the processing unit and in the absence of a second actuatable valve of a second control module of the gas regulation system being open."

Accordingly, Applicant submits that Fujita does not disclose each and every claim element arranged as in the claim, and absent anticipatory disclosure in Fujita of each and every element of the claimed invention arranged as in the claim, Fujita cannot be anticipatory.

Regarding Claims 10-11, 13-15, and 18

Dependent Claims inherit all the limitations of the respective parent claim. In view of the foregoing remarks, Applicant respectfully submits that Claims 10-11, 13-15, and 18 are directed to allowable subject matter and requests reconsideration and allowance thereof.

In view of the foregoing remarks, Applicant submits that Fujita does not disclose each and every element of the claimed invention arranged as claimed and therefore cannot be anticipatory. Accordingly, Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. §102(b) has been traversed, and requests that the Examiner reconsider and withdraw of this rejection.

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Rejections Under 35 U.S.C. §103(a)

Claims 2 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Fujita as applied to Claims 1 and 16, and further in view of Agricola et al. (U.S. Publication 2002/0134342, hereinafter Agricola).

Claims 3 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Fujita as applied to Claims 1 and 16, and further in view of Takeda et al. (U.S. Publication 2002/0092575, hereinafter Takeda).

Claims 4-5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Fujita as applied to Claim 1, and further in view of Belcher, Jr. (U.S. Patent Number 2,793,813 hereinafter Belcher).

Claims 4-5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Fujita.

Claims 6 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Fujita as applied to Claim 1, and further in view of Petite et al. (U.S. Publication 2002/0125998, hereinafter Petite).

Claims 6 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Fujita.

Claim 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Fujita as applied to Claim 1, and further in view of Watson. (U.S. Patent Number 3,322,135 hereinafter Watson).

Claims 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Fujita in view of Agricola as applied to Claim 2, and further in view of Takeda.

Claim 17 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Fujita as applied to Claim 16, and further in view of Agricola.

Claim 21 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Fujita as applied to Claim 16, and further in view of Belcher.

Claims 22-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Fujita in view of Agricola as applied to Claim 17, and further in view of Takeda.

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Claim 26 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Fujita as applied to Claim 25, and further in view of Belcher.

Claims 1, 10-11, 14, 16, 18, and 25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over McJones (U.S. Patent Number 3,719,196, hereinafter McJones) in view of Fujita.

Claims 2 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over McJones and Fujita as applied to Claim 1, and further in view of Agricola.

Claims 3 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over McJones and Fujita as applied to Claim 1, and further in view of Takeda.

Claims 4-5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over McJones and Fujita as applied to Claim 1, and further in view of Belcher.

Claims 4-5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over McJones and Fujita.

Claims 6 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over McJones in view of Fujita as applied to Claim 1, and further in view of Petite et al. (U.S. Patent Publ. No. 2002/0125998, hereinafter Petite).

Claims 6 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over McJones and Fujita.

Claim 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over McJones and Fujita as applied to Claim 1, and further in view of Watson.

Claim 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over McJones, Fujita, and Agricola as applied to Claim 2, and further in view of Takeda.

Claim 13 stands rejected under 35 U.S.C. §103(a) as being unpatentable over McJones and Fujita as applied to Claim 1, and further in view of Fujita.

Claim 15 stands rejected under 35 U.S.C. §103(a) as being unpatentable over McJones and Fujita as applied to Claim 1, and further in view of Fujita.

Claim 17 stands rejected under 35 U.S.C. §103(a) as being unpatentable over McJones and Fujita as applied to Claim 16, and further in view of Agricola.

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Claim 21 stands rejected under 35 U.S.C. §103(a) as being unpatentable over McJones and Fujita as applied to Claim 16, and further in view of Belcher.

Claims 22-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over McJones, Fujita and Agricola as applied to Claim 17, and further in view of Takeda.

Claim 26 stands rejected under 35 U.S.C. §103(a) as being unpatentable over McJones and Fujita as applied to Claim 25, and further in view of Belcher.

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention *arranged in such a manner as to perform as the claimed invention performs*. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

Additionally, Applicant respectfully submits that obviousness cannot be supported by a proposed modification that would *render the prior art invention being modified unsatisfactory for its intended purpose*. *In re Gordon*, 221 USPQ 1125 (Fed. Cir. 1984); MPEP §2143.01.

Regarding Examiner's Paragraphs 5-16 and 18-31

The Examiner acknowledges that Fujita does not disclose each and every element of the claimed invention, and looks to various other references to cure the deficiencies of Fujita.

In view of the claims under Examiner's Paragraphs 5-16 and 18-31 being dependent claims, Applicant not only agrees that Fujita is deficient in teaching each and every element of the claimed invention, but that Fujita is also deficient in disclosing each and every element of the respective parent claim, as set forth above, and that the various references cited by the Examiner to reject the subject dependent claims are deficient in curing the core deficiencies of Fujita with respect to the parent claims. Accordingly, absent a teaching or suggestion of each and every element of the claimed invention

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arranged so as to perform as the claimed invention performs, a prima facie case of obviousness cannot be established.

For at least the reasons set forth above regarding the patentability of the parent claims, Applicant submits that the dependent claims under Examiner's Paragraphs 5-16 and 18-31 are patentable because the references fail to cure the deficiencies of Fujita with respect to a teaching or suggestion of each and every element present in the parent claims.

Regarding Claim 7 More Specifically

Claim 7 recites, inter alia,

"...wherein the gas storage device comprises *a unique identifier that can be read by the manifold controller.*"

In alleging obviousness of Claim 7, the Examiner has not stated with specificity where each and every element of Claim 7 arranged so as to perform as the claimed invention performs may be found in the cited references.

Absent a showing of each and every element of the claimed invention arranged so as to perform as the claimed invention performs, a prima facie case of obviousness cannot be established.

Regarding Examiner's Paragraph 17, and Independent Claims 1, 16 and 25

The Examiner acknowledges that McJones is deficient in teaching the claimed invention as a whole, and looks to Fujita to cure these deficiencies.

The Examiner alleges "McJones does not disclose a power source in electrical communication with each of the actuatable valves. Fujita discloses the use of a power source for controlling the actuatable valves and also that the valves are electrical. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the electrical controls and the electrically actuatable valves of Fujita onto the system of McJones, in order to have more control of the system." (Paper 20060215, page 10)

In comparing the combination of McJones and Fujita with the instant invention, Applicant finds McJones to teach a sequential tank charging process wherein "Means is also provided to *prevent gas communication* between a container and the source of

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pressurized gas *when another container is being charged*” (McJones, col. 2, lines 10-13). Fujita discloses a “... trouble detecting means which judge [sic] a trouble of the gas pressure detecting means on the basis of the *opening and closing actions of at least two stop valves* among the respective stop valves and the gas pressure detected by the gas pressure detecting means fitted together with the at least two stop valves.” (Fujita, paragraph [0006], lines 9-14).

If McJones were to be modified by Fujita as suggested by the Examiner, then McJones would necessarily include a trouble detecting means that judges trouble of the gas pressure detecting means *on the basis of the opening and closing actions of at least two stop valves*. Also, as discussed above, Fujita may be configured for “*fully opening all of the fully closed stop valves*” or “the device may be configured to *simultaneously open two or more stop valves*”. Accordingly, a modified McJones would necessarily include a configuration where more than one valve were open.

In view of the foregoing, Applicant submits that modification of McJones to incorporate the testing means as taught by Fujita would render the sequential charging process of McJones unsatisfactory for its intended purpose (a sequential charging process would no longer be sequential if more than one valve were open at the same time).

Accordingly, Applicant submits that Fujita is absent any teaching, suggestion or motivation to modify McJones for the purpose of arriving at the claimed invention while maintaining McJones to be satisfactory for its intended purpose. As such, Applicant submits that the combination of McJones and Fujita does not establish a prima facie case of obviousness.

Regarding Claims 16 and 25 More Specifically

In comparing the reasons for rejection as set forth by the Examiner with regard to Claims 16 and 25, Applicant finds that the Examiner has merely provided a broad, conclusory restatement of the claim language, without specific recitation of where each and every element of the claimed invention may be found in the combination of McJones and Fujita.

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As such, Applicant submits that a broad, conclusory restatement of the claim language without specific direction within the references to where each and every element arranged in a manner to perform as the claimed invention performs, does not in and of itself establish a prima facie case of obviousness. Absent a specific teaching or suggestion in the references of each and every element of the claimed invention arranged so as to perform as the claimed invention performs, McJones and Fujita cannot properly be combined to establish a prima facie case of obviousness.

In view of the foregoing, Applicant submits that the references are absent a teaching, suggestion or motivation to arrive at each and every element of the claimed invention arranged to perform as the claimed invention performs and are therefore wholly inadequate in their teaching of the invention as a whole, fail to motivate one skilled in the art to do what the patent applicant has done as such a combination would render the prior art being modified unsatisfactory for its intended purpose, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §103(a), which Applicant considers to be traversed.

In light of the foregoing, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) have been traversed, and respectfully requests that the Examiner reconsider and withdraw these rejections.

Regarding New Claims 31-32

Applicant has added new Claim 31, which depends from Claim 1, and new Claim 32, which depends from Claim 16. No new matter has been added as antecedent support may be found in the application as originally filed, such as in the originally filed claims (Claim 31 subject matter) and Paragraph [0025] (Claim 32 subject matter), for example.

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In view of the remarks set forth above regarding the allowability of Claims 1, 7 and 16, Applicant submits that Claims 31-32 are allowable, and respectfully requests entry and notice of allowance thereof.

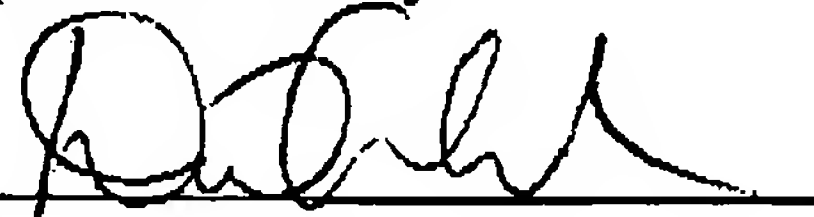
The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 06-1130.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above-identified Deposit Account.

Respectfully submitted,

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